LOW YIELD RATIO, HIGH STRENGTH... Inventors: Nobuyuki Ishikawa et al. EMC: EV 591422035 US

Sheet 1 of 7
Docket No.: JFE-05-1735
DLA Piper Rudnick Gray Cary US LLP: (215) 656-3381

FIG.1

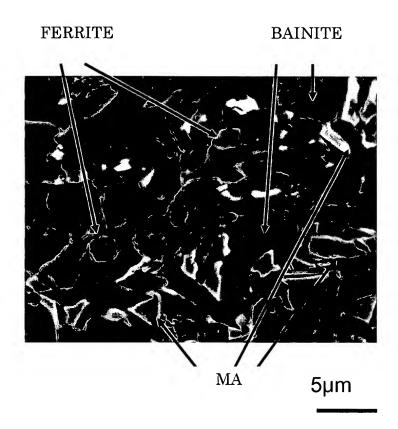
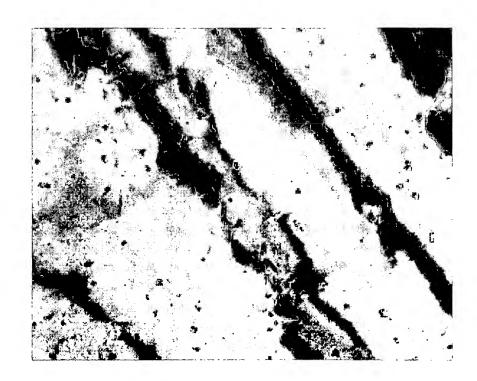


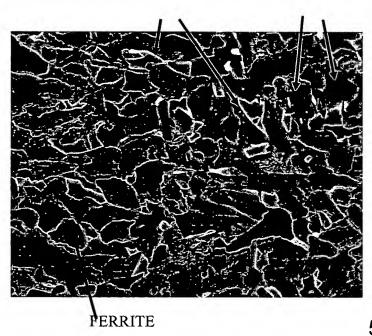
FIG.2



LOW YIELD RATIO, HIGH STRENGTH...
Inventors: Nobuyuki Ishikawa et al.
EMC: EV 591422035 US
Sheet 2 of 7
Docket No.: JFE-05-1735
DLA Piper Rudnick Gray Cary US LLP: (215) 656-3381

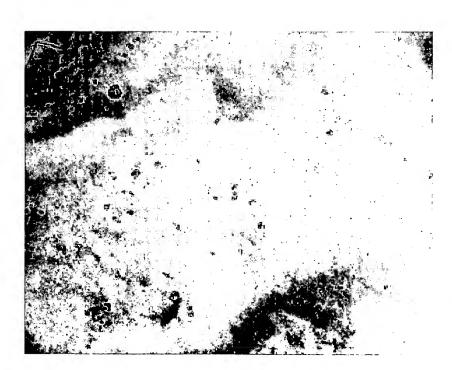
FIG.3

MA **BAINITE**



5µm

FIG.4

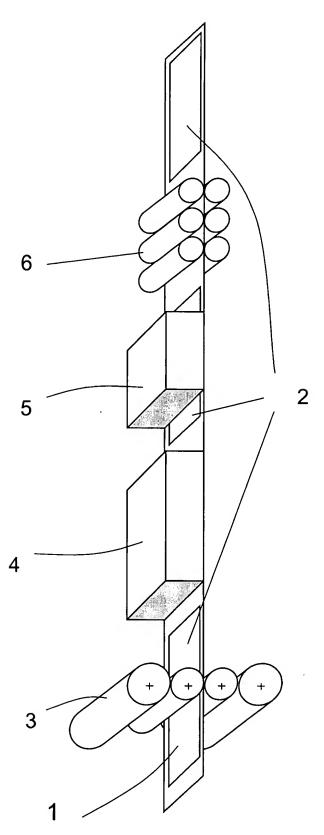


50nm

LOW YIELD RATIO, HIGH STRENGTH... Inventors: Nobuyuki Ishikawa et al. EMC: EV 591422035 US

Sheet 3 of 7
Docket No.: JFE-05-1735
DLA Piper Rudnick Gray Cary US LLP: (215) 656-3381

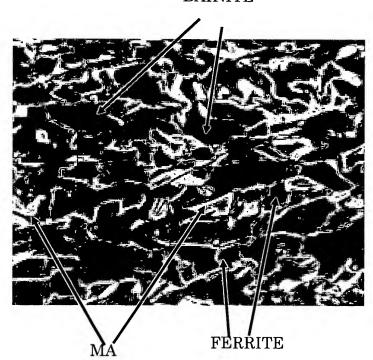




LOW YIELD RATIO, HIGH STRENGTH...
Inventors: Nobuyuki Ishikawa et al.
EMC: EV 591422035 US
Sheet 4 of 7
Docket No.: JFE-05-1735
DLA Piper Rudnick Gray Cary US LLP: (215) 656-3381

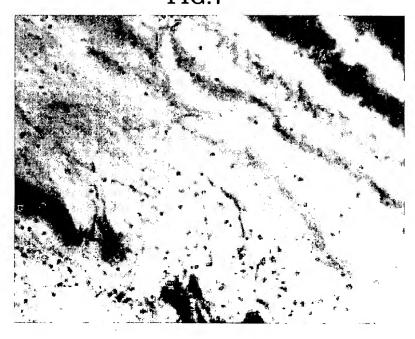
FIG.6

BAINITE



5µm

FIG.7



50nm

LOW YIELD RATIO, HIGH STRENGTH... Inventors: Nobuyuki Ishikawa et al. EMC: EV 591422035 US

Sheet 5 of 7
Docket No.: JFE-05-1735
DLA Piper Rudnick Gray Cary US LLP: (215) 656-3381

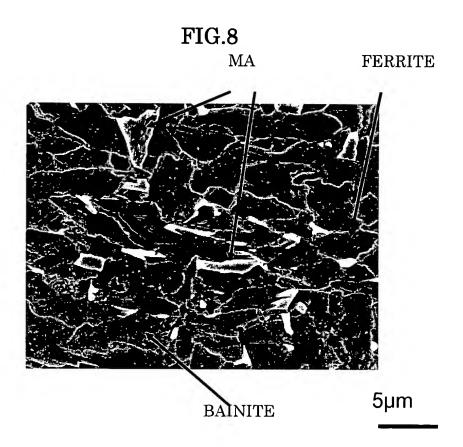


FIG.9



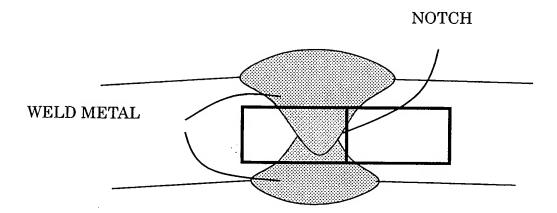
50nm

LOW YIELD RATIO, HIGH STRENGTH... Inventors: Nobuyuki Ishikawa et al.

EMC: EV 591422035 US Sheet 6 of 7 Docket No.: JFE-05-1735

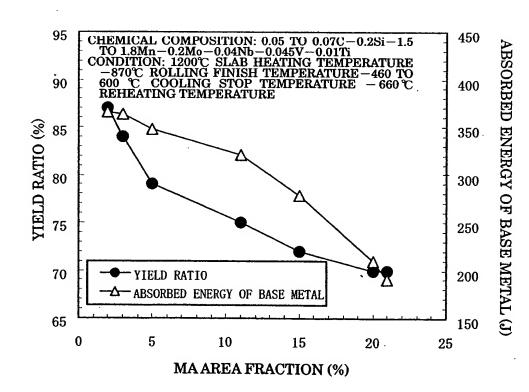
DLA Piper Rudnick Gray Cary US LLP: (215) 656-3381

FIG.10



WELD METAL: HAZ = 1:1

FIG.11



LOW YIELD RATIO, HIGH STRENGTH... Inventors: Nobuyuki Ishikawa et al. EMC: EV 591422035 US Sheet 7 of 7

Docket No.: JFE-05-1735
DLA Piper Rudnick Gray Cary US LLP: (215) 656-3381

FIG.12

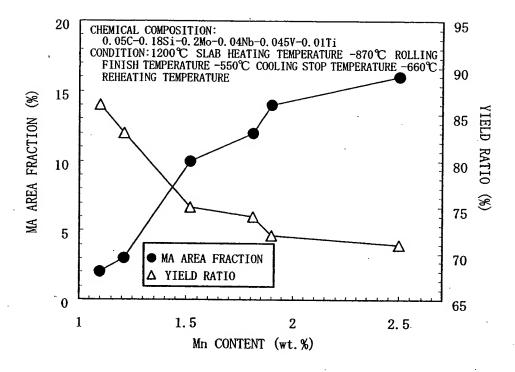


FIG.13

